

**Amendments to the Claims:**

Claims 1-55 (Canceled)

56. (Currently Amended) A system comprising:

a network having a host coupled thereto, the network operating asynchronously,  
the host executing software to generate packets for communication on the network;

a bus with a bus device coupled thereto, wherein the bus device generates  
isochronous data ~~and the network operates asynchronously,~~ such that the isochronous data  
is transported over the an asynchronous network;

an interface coupling the network to the bus, the interface and the host  
coordinating to tunnel bus device packets over the network between the host and the bus  
device, wherein the host runs an application that generates the bus device packets, the bus  
device packets being isochronous data, and relies on an operating system that includes a  
driver for the bus device, the driver to issue the bus device packets and redirect the bus  
device packets to a network stack that encapsulates the bus device packets to create a  
network packet and sends the network packet to the bus device via the interface, the  
interface to decapsulate the network packet to obtain the bus device packet and forward  
the bus device packet to the bus device.

57. (Currently Amended) The system defined in Claim 56, wherein the  
interface generates network packets that encapsulate ~~the bus events~~ in a network protocol  
portion.

58. (Previously Presented) The system defined in Claim 57, wherein the  
network protocol portion comprises an Internet Protocol (IP) portion.

59. (Previously Presented) The system defined in Claim 57, wherein the  
network protocol portion includes a header for information to recreate bus events.

60. (Currently Amended) The system defined in Claim 56, wherein each network packet ~~tunneled request~~ includes a tunneling header and a tunneling data portion, wherein the tunneling data portion is specific to each tunneling packet type and tunneling transaction type, and the tunneling header is common among tunneling packet types.

61. (Currently Amended) The system defined in Claim 60, wherein the tunneling header includes a field ~~filed~~ which specifies the type of packet as one of a group of control packet, an information packet, or an ownership packet.

62. (Previously Presented) The system defined in Claim 60, wherein the tunneled packet comprises an IEEE 1394 packet.

63. (Previously Presented) The system defined in Claim 60, wherein the tunneled packet comprises a USB packet.

64. (Previously Presented) The system defined in Claim 60, wherein the tunneling header indicates the packet type and transaction type.

65. (Previously Presented) The system defined in Claim 56, wherein the interface comprises a remote peripheral server.

66. (Previously Presented) The system defined in Claim 56, wherein the network comprises an Internet Protocol (IP) Ethernet network.

67. (Previously Presented) The system defined in Claim 56, wherein the bus comprises a serial bus.

68. (Previously Presented) The system defined in claim 56, wherein the bus comprises a parallel bus.

69. (Previously Presented) The system defined in Claim 56, wherein the bus adheres to the IEEE-1394 bus standard.

70. (Previously Presented) The system defined in Claim 56, wherein the bus adheres to the Universal Serial Bus Standard (USB).

71. (Currently Amended) A system comprising:  
a network having a host coupled thereto, the network operating asynchronously,  
the host executing software to generate packets for communication on the network;  
a bus with a bus device coupled thereto, wherein the bus device generates isochronous data ~~and the network operates asynchronously,~~ such that the isochronous data is transported over the an asynchronous network  
an interface coupling the network to the bus, the interface and the host coordinating to tunnel bus device packets over the network between the host and the bus device, wherein the bus device generates the bus device packets, the bus device packets being isochronous data, for transport to the host and sends the bus device packets on the bus, the interface to encapsulate the bus device packets into a network packet and forward the network packet to the host, the host to execute a network driver that decapsulates the network packet, identify the bus device packets therein and redirect the bus device packets to a bus device driver running thereon.

72. (Currently Amended) The system defined in Claim 71, wherein the interface generates network packets that encapsulate ~~the bus events~~ in a network protocol portion.

73. (Previously Presented) The system defined in Claim 72, wherein the network protocol portion comprises an Internet Protocol (IP) portion.

74. (Previously Presented) The system defined in Claim 72, wherein the network protocol portion includes a header for information to recreate bus events.

75. (Currently Amended) The system defined in Claim 71, wherein each network packet tunneled request includes a tunneling header and a tunneling data portion, wherein the unending data portion is specific to each tunneling packet type and tunneling transaction type, and the tunneling header is common among tunneling packet types.

76. (Previously Presented) The system defined in Claim 75, wherein the tunneling header includes a field which specifies the type of packet as one of a group of control packet, an information packet, or an ownership packet.

77. (Previously Presented) The system defined in Claim 75, wherein the tunneled packet comprises an IEEE 1394 packet.

78. (Previously Presented) The system defined in Claim 75, wherein the tunneled packet comprises a USB packet.

79. (Previously Presented) The system defined in Claim 75, wherein the tunneling header indicates the packet type and transaction type.

80. (Previously Presented) The system defined in Claim 71, wherein the interface comprises a remote peripheral server.

81. (Previously Presented) The system defined in Claim 71, wherein the network comprises an Internet Protocol (IP) Ethernet network.

82. (Previously Presented) The system defined in Claim 71, wherein the bus comprises a serial bus.

83. (Previously Presented) The system defined in claim 71, wherein the bus comprises a parallel bus.

84. (Previously Presented) The system defined in Claim 71, wherein the bus adheres to the IEEE-1394 bus standard.

85. (Previously Presented) The system defined in Claim 71, wherein the bus adheres to the Universal Serial Bus Standard (USB).

86. (Currently Amended) A method of controlling devices across a network comprising:

capturing bus events generated on a bus by a bus device that generates isochronous data;

encapsulating the captured bus events into a packet associated with a network protocol using an ~~the~~ interface;

transporting the encapsulated bus event over a network that operates asynchronously, such that the isochronous data is transported over the ~~an~~ asynchronous network;

decapsulating the encapsulated bus events, to recreate the bus events at a remote site using information in the header of the packet, wherein capturing, encapsulating, and decapsulating are performed while preserving one or more local bus properties.

87. (Currently Amended) The method defined in Claim 86, wherein the remote site comprises a ~~similar bus~~ of the same type and a ~~similar~~ bus device of the same type to that which generated the bus events.

88. (Currently Amended) An apparatus for controlling devices across a network comprising:

means for capturing bus events generated on a bus by a bus device that generates isochronous data;

means for encapsulating the captured bus events into a packet associated with a network protocol using an ~~the~~ interface;

means for transporting the encapsulated bus event over a network that operates asynchronously, such that the isochronous data is transported over the ~~an~~-asynchronous network;

means for decapsulating the encapsulated bus events, to recreate the bus events at a remote site using information in the header of the packet, wherein capturing, encapsulating, and decapsulating are performed while preserving one or more local bus properties.